ABSTRACT OF THE DISCLOSURE

A novel calixarene compound, a method for manufacturing the same, an intermediate of the calixarene compound, and a composition comprising the same are provided. The calixarene compound is expected to be useful as an inclusion compound and, if functional groups are introduced, can be used for a curable composition and a photoresist and as an inclusion compound. The calixarene compound is shown by following formula (1):

[Formula 1]

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$$Z^{17}O \xrightarrow{(X^9)_{q9}} OZ^{18} \xrightarrow{(X^3)_{q3}} Z^{19}O \xrightarrow{(X^{10})_{q10}} OZ^{20}$$

$$Z^{16}O \xrightarrow{(X^9)_{q8}} CH \xrightarrow{Z^{5}O} CH \xrightarrow{Z^{5}O} CH \xrightarrow{CH} CH \xrightarrow{CH} OZ^{21}$$

$$Z^{15}O \xrightarrow{CH} CH \xrightarrow{R^4} R^5 \xrightarrow{R^3} CH \xrightarrow{CH} OZ^{23}$$

$$Z^{13}O \xrightarrow{Z^{4}O} CH \xrightarrow{R^4} CH \xrightarrow{CH} OZ^{24}$$

$$Z^{12}O \xrightarrow{Z^{10}O} CH \xrightarrow{CH} CH \xrightarrow{CH} OZ^{24}$$

$$Z^{12}O \xrightarrow{Z^{10}O} CH \xrightarrow{Z^{10}O} OZ^{10}$$

$$Z^{10}O \xrightarrow{Z^{10}O} OZ^{10}$$

wherein R^1 to R^6 individually represent a substituted or unsubstituted alkylene group having 1 to 8 carbon atoms; X^1 to

group having 1 to 10 carbon atoms, a substituted or unsubstituted alkenyl group having 2 to 10 carbon atoms, a substituted alkenyl group having 2 to 10 carbon atoms, a substituted or unsubstituted alkynyl group having 2 to 10 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 10 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 10 carbon atoms, a substituted or unsubstituted alkoxyl group having 1 to 10 carbon atoms, or a substituted or unsubstituted phenoxy group; Z¹ to Z²⁴ individually represent a hydrogen atom, a group having a polymerizable functional group, a group having an alkali-soluble group, or a substituted alkyl group having an alkyl chain with a 1-8 carbon atom content, or two adjacent Zs in combination represent a substituted or unsubstituted alkylene group having 1 to 8 carbon atoms; q¹ to q¹² individually represent an integer of 0 or 1.